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1 42. (once amended) The combination of claim 30 wherein said tip
2 portion is detachable from said [core] wire by electrolytic disintegration of part of
3 said wire.

Remarks

Claims 1 - 24 were original in the application and have been canceled without prejudice. Claims 25 - 37 were added as better defining the invention.

Claims 25 – 29 and 35 were previously cancelled. Claims 38 – 42 had been added to provide a parallel dependent claim chain to both claims 30 and 31.

This preliminary amendment is submitted in reliance on the action that the proposed Amendment After Final will not be entered. Hence, the amendment is repeated with some additional changes responsive to the Advisory Action of June 11, 1999.

The Advisory Action of June 11, 1999 correctly states that claim 31 does not require two markers on the catheter. A lack of antecedent basis for "said distal end" is responsively amended at line 3 by the preliminary amendment. The noted points of indefiniteness of claims 32, 36, 37, 38, and 41 have been responsively amended as well.

Claims 30 – 34 and 36 – 42 were rejected in the Final Office Action under 35 USC 112, first paragraph, on the ground that in claim 30 there was no disclosure that the tip portion was fully disposed in the "catheter" instead of the body cavity when the markers are aligned.

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Claim 31 was rejected in the Final Office Action under 35 USC 112, first paragraph, on the ground that there was no disclosure that the alignment of the marker with the distal end marker of the catheter exposed the tip portion by a predetermined distance.

Claim 30 has been amended to clarify that the radioopaque markers are disposed on the wire and the catheter so that when the marker at the distal end of the catheter is disposed adjacent to an opening of the body cavity and when the wire is telescopically disposed in the catheter to approximately align the wire's radioopaque marker with the more proximal catheter marker, the detachable elongate tip portion then is fully disposed in the body cavity. This idea is literally supported by the specification at page 8, lines 9 – 12; page 10, lines 4 – 8; and page 24, lines 9 – 11. The claim earlier erroneously referred to full disposition in the "catheter", when full disposition in the "body cavity" was meant.

Consider now claim 31. At page 24, lines 9 – 13, the specification provides:

"Similarly, wire 10 has a radioopaque marker 112 defined on it such that marker 112 on wire 10 is approximately aligned with marker 110 on microcatheter 14 when coil 56 is fully deployed into aneurysm 64. Typically, full deployment will place the solder or connection point 54 of the order of 2-3 mm past opening 68 of aneurysm 64."

Thus, the alignment of markers 110 and 112 shown in Fig. 8 exposes the tip portion (coil) 56 by a predetermined distance, namely the distance which would fully deploy the tip in the vascular cavity or place the solder point 54 (see Fig. 4)

between the wire and its coil 56 2 – 3 mm past the opening 68 of the body cavity with the end of the catheter at the opening of the body cavity as shown in Fig. 8 .

As disclosed in the illustrated embodiment of Fig. 4 there is an exposed stainless steel section soldered to the wire at the proximal end of the exposed stainless steel section, i.e. connection point 50, and a platinum coil soldered to the opposing end of the exposed stainless steel section, i.e. connection point 54. The electrolytic detachment will occur at some point or region within the exposed stainless steel section, since platinum is comparatively resistant to electrolysis. The wire marker is proximal to the to connection point 50. When the wire and catheter markers are aligned at least connection point 54 will be advanced into the body cavity and exposed. If the stainless steel section between connection points 54 and 50 is shorter than 2-3 mm in length then the entire stainless steel section will typically be deployed in the body cavity. At the very least, connection point 54 is disposed in the body cavity. It can be assured that connection point 50 is also disposed 2 – 3 mm into the body cavity by putting the wire's marker 2 – 3 mm behind connection point 50, and aligning the wire marker with a catheter distal tip marker. Since electrolysis must occur between connection points 54 and 50, the detached end of the tip, comprised of the attached portion of the stainless steel section and the platinum coil, is also necessarily disposed within the body cavity. By this means the pigtail of the detached tip does not extend out of the body cavity into the adjacent vessel or lumen, which if it were to occur would tend to lead to unintended clotting In the vessel.

The Applicant has responsively amended the claims to meet each of the Examiner's objections under 35 USC 112, second paragraph. Again thanks is given for the care of review.

Advancement of the claims to issuance is respectfully requested.

Respectfully submitted,



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